

## pharmacy news

### Coming Events

#### Tuesday 8 February 2011

PSA lecture, topic 'Bowel cancer screening' by Cancer Council Victoria, to be held at Horsham Sports and Community Club, 7pm for dinner and 8 pm for lecture. 1 CPD point applies.

RSVP to Carlie Streeter p: 0409 838 293 or e: [carlie.streeter@bigpond.com](mailto:carlie.streeter@bigpond.com)

#### Medication review Stage 1 courses

21 + 22 February at Monash Uni Royal Parade Parkville e: [Terry.wong@psavic.com.au](mailto:Terry.wong@psavic.com.au)

12 + 13 March and repeated 14 + 15 May 2011 at St. Leonards, NSW. [www.psa.org.au](http://www.psa.org.au)

#### Sunday 6 March 2011

PSA Sunday lecture, 10 – 11 am at Golf Club, Horsham, 'New CPD requirements and methods', by David Ford, pharmaceutical advisor, PSA Victoria. RSVP Carlie Streeter. 1 CPD point applies.

#### Sunday 27 March 2011

Cardiology update at Commodore on the Park, Mt. Gambier. 2 expert speakers [www.psa.org.au](http://www.psa.org.au)

### Pharmacist role in General Practice?

An article in Australian Family Physician discusses a potential role for Pharmacists in a multi-disciplinary general practice. UK and Canada are piloting integrating pharmacists into GP settings. General Practices are required to have clinical risk management systems in place to enhance the quality and safety of health care. A challenge in General Practice is managing adverse drug events, one of the most significant causes of morbidity in the Australian community. Health assessments, chronic disease management plans and home medicines reviews (HMR) are Medicare Benefits Schedule items that support drug safety. The article states that HMR research to date has been disappointing overall and have shown only limited benefits to patients. This article proposed that a Pharmacist's role in General Practice would focus on:

- services to high risk patients.
- managing practice drug surveillance systems e.g. for those taking critical dose drugs such as warfarin, digoxin, those on long term narcotics or immunosuppressive drugs.
- enhancing medication safety e.g. after hospital discharge.
- developing policies that enhance quality prescribing e.g. using software auditing tools to identify suboptimal prescribing such as metformin in renal impairment, rosiglitazone in HF, digoxin with verapamil.

*Australian Family Physician Vol 39 No 3 March 2010 p 163*

Christopher Freeman from the University of Queensland is undertaking research on this issue right now – have your say by clicking on the link of this week's PSA eBulletin.

### NPS current consumer campaign is 'Be Medicineswise'

This week is 'Be Medicineswise' week. NPS commenced a strong consumer campaign aimed at improving safety with medicines, that include radio, television, magazine and online promotion. The campaign focuses on 3 main messages when consumers think about their medicines:

**Know, Find and Ask.**

**Know it's a medicine:** Clearly prescriptions are medicines but also know that purchased medicines from pharmacies, supermarkets or online, as well as herbal remedies, vitamins and other supplements are also considered to be medicines.

**Find the active ingredient:** To avoid confusion, mixing up your medicines and double dosing, know how to find the active ingredient.

**Ask the right questions:** Ask for more information from trusted sources to gain the most benefit from your medicines and make better informed decisions.

Visit <http://www.nps.org.au/bemedicinewise> for consumers and

[http://www.nps.org.au/health\\_professionals/campaigns/medicinewise](http://www.nps.org.au/health_professionals/campaigns/medicinewise) for health professionals.

### **Evaluation of the RMMR Program – from AACP**

The RMMR program evaluation was conducted by Campbell Research & Consulting. Key Findings:

1. The RMMR Program is meeting its objectives to improve medication management for older Australians in Aged Care Homes (ACH) and to improve the Quality Use of Medicines (QUM) in ACH.
2. Medication Reviews are an appropriate means of achieving quality medication management for residents of ACH.
3. Collaborative Reviews are more likely to result in medication changes, positive health outcomes and improved professional relationships.
4. There is scope to increase the proportion of Reviews conducted as Collaborative Reviews.
5. The current business rules are flexible and enable a range of models for RMMR providers.
6. The whole-of-facility QUM service is a valuable component of the Program.
7. Funding provided for QUM does not reflect whole-of-facility QUM services.
8. The administrative burden of the RMMR program could be reduced by creating an online system for claiming, payment and submission of QUM reports.

For the full report visit

<http://www.health.gov.au/internet/main/publishing.nsf/Content/fourth-community-pharmacy-agreement-evaluation-reports>

### **Generic medicines literacy – an article in MJA**

Because Australians have access to multiple generic brands of medicines, there is potential for confusion by patients if they do not fully understand what medicines they are taking, with risk for duplication. Strategies to improve medicines literacy for consumers and carers include:

**Know the drug name.** Prescribers and pharmacists should explain the name of each medicine, aimed at helping consumers know the active ingredient in the medicine they are taking rather than the product's brand name.

**Medicines information.** Information such as consumer medicine information should be provided and explained.

**Know what the medicine is for.** Encourage consumers to know what each medicine is for.

**Up-to-date medicines list.** Support consumers in keeping a list of their current medicines that includes the name of the active ingredient, the brand name and the dose.

**Clear medicine labels.** Labelling should display the active ingredient in the product with equal or greater prominence compared to the brand name. *MJA 2010; 192 (7): 368-369*

### **Smoking causes genetic damage within minutes after inhaling**

Lung cancer claims a global toll of 3,000 lives each day, largely as a result of cigarette smoking, that is also linked to at least 18 other types of cancer. Scientists added a labelled polycyclic aromatic hydrocarbon, (PAH), phenanthrene, to cigarettes and tracked it in 12 volunteers who smoked the cigarettes. Phenanthrene quickly forms a toxic substance in the blood known to trash DNA, causing mutations that can cause cancer. The smokers developed maximum levels of the substance in just 15-30 minutes after they finished smoking, so quickly that it is equivalent to injecting the substance. It was concluded that cigarette smoke begins to cause genetic damage within minutes — not years — after inhalation into the lungs in humans, a stark warning to those tempted to start smoking. *From Chemical Research in Toxicology.*

### **No stroke risk found with HRT patches**

While oral oestrogen replacement therapy with or without progestogen is associated with an increased risk of stroke in postmenopausal women, a new study has found that transdermal HRT containing low doses of oestrogen is not associated with an increased risk of stroke. The *BMJ* study analysed data from almost 16,000 cases of stroke in the UK General Practice database.

## Accepted prescribing abbreviations, terminology and symbols

The use of inconsistent, ambiguous and non-standard abbreviations and terminology when prescribing medicines in Australian hospitals is a major cause of medication errors. The Australian Commission on Safety and Quality in Healthcare issued a set of recommendations that comprehensively outlines acceptable and unacceptable terms for prescribing in hospitals, available at

[http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/D0DABD9912D44A14CA257516000FDABB/\\$File/18202.pdf](http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/D0DABD9912D44A14CA257516000FDABB/$File/18202.pdf)

Prescriptions should not contain any abbreviations other than those that are in universal and common use. Changes to policy enabling staff with differing levels of training to administer medicines necessitates the use of English, because some levels of training do not include Latin. Drug names should never be abbreviated and should always be written in full. Use generic drug names, except when using critical dose drugs where brands do matter (e.g. Coumadin or Marevan) and when brand names avoid errors (e.g. use Endone instead of oxycodone, MS Contin instead of morphine SR). Do not order 'CHOP' for the chemotherapy regimen; prescribe each drug separately. Other key tips include:

- Include any modified release initials e.g. tramadol **SR**, carbamazepine **CR**.
- Avoid using the salt name e.g. hydrochloride, HCl and KCl that have been misconstrued.
- Use 'units', not 'u'.
- Use bd not bid; tds, not tid
- Use 'every 4 hours' or '4 hrly' not 'q4h' or 4/24.
- Use 'three times per week' or 'every 3 weeks', not 'three times weekly'.
- Use words or Hindu-Arabic numbers 1, 2, or 3, not i, ii or iii.
- Use a leading zero for quantities less than 1, e.g. use 0.5, not .5.
- Do not use trailing zeroes for quantities more than 1 e.g. use 5 not 5.0.
- Use 'subcut' not SC.
- Use 'microg' or 'microgram', not µg, ug or mcg.

Each hospital's Drug + Therapeutics Committee or Medication Advisory Committee is asked to put in place a policy on this issue.

## Diclofenac linked to increased stroke risk

A co-author of a Danish study that linked NSAID use with stroke risk suggests that diclofenac should be banned. The study examined data derived from the entire Danish population, about 5.5 million people, over eight years. More than 2.6 million had a prescription for NSAIDs. The study found diclofenac increased the risk of stroke by 86 per cent in people not previously thought to be at risk. Ibuprofen was linked to a 30 per cent increased risk of stroke when more than 1200 milligrams (> 3x400 mg tablets daily) were taken. With these figures, diclofenac appears to be as risky as rofecoxib (Vioxx), withdrawn in Australia in 2004 because it was found to increase the risk of heart attack. Short term use less than 30 days showed the same or greater risk than long term use. Diclofenac displayed a higher risk than ibuprofen and naproxen.

## Overdoses with antidepressants in decline

New Australian figures from a review of 5,500 presentations at Victorian hospital emergency departments shows that the number of overdoses with antidepressants is in steady decline since peaking in around 2001, despite increasing use of the drugs. The study shows that the risks of overdose have declined in line with the switch from older, more toxic tricyclics to the less toxic SSRIs and other new antidepressant classes. Overdoses with SSRIs has declined from a peak of almost 9 per 100,000 population in 2001 to around 5 per 100,000 in 2007, even though usage of the drugs increased substantially during that period. Overdoses fell for all antidepressants. Overdose is most common among females and younger people in the 20-24 year age group. *Australia and NZ Journal of Psychiatry (44:759-64)*

## Differences between beta-blockers in patients with chronic HF with COPD

This randomised, open-label Australian study investigated the effects of switching between non-selective (carvedilol) and  $\beta$ 1-selective beta-blockers (metoprolol and bisoprolol) in 51 patients with

inadequately treated chronic heart failure. 35 subjects also had COPD. It was found that  $\beta$ 1-selective agents produced less adverse effects on FEV<sub>1</sub> values, but were less effective at managing heart failure measures than non-selective vasodilator agents such as carvedilol. In commenting on the results, one expert said that he would not advocate any of the beta-blockers in patients with significant asthma and would perform formal respiratory lung function tests to check for bronchodilator reversibility if there is any concern. *J Am Coll Cardiol* 2010;55:1780-1787. Also at <http://www.medscape.com/viewarticle/722394>

### **Newer antiepileptic drugs might increase risk of suicidal behaviour**

An observational UK study of 44,300 patients with epilepsy found that use of some newer antiepileptic drugs was associated with an increased risk of suicidal behaviour and self-harm. Drugs were classified into four groups: barbiturates, conventional antiepileptic drugs and newer antiepileptic with low potential (lamotrigine, gabapentin, pregabalin, oxcarbazepine) or high potential (levetiracetam, tiagabine, topiramate, vigabatrin) of causing depression. Potential (odds ratio) of causing self-harm/suicidal behaviour compared to no treatment during the last year was found to be associated with the use of these drugs:

- High risk new drugs OR = 3.08; 95% CI, 1.22–7.77
- Low-risk new drugs OR = 0.87; 95% CI 0.47–1.59
- Conventional OR = 0.74; 95% CI 0.53–1.03
- Barbiturates OR = 0.66; 95% CI 0.25–1.73

*Neurology* 2010;75:335-40

### **Resources for health professionals and patients on low vitamin D**

Over the winter months more people may be at risk of vitamin D deficiency as our bodies store enough vitamin D for only 30 to 60 days. Some sun exposure is necessary from May to September when UV levels are below index 3, low UV exposure. SunSmart launched a vitamin D awareness campaign that promotes 2 to 3 hours of sun exposure weekly over winter, and more exposure for those at high risk of deficiency e.g. dark skinned people. Resources are available in multiple languages from [www.sunsmart.com.au/vitamin\\_d](http://www.sunsmart.com.au/vitamin_d) **Solariums are not a safe way to obtain vitamin D.** Also see FAQs on solariums from SunSmart at [http://www.sunsmart.com.au/sun\\_protection/tanning\\_and\\_solariums/faqs\\_about\\_solariums/](http://www.sunsmart.com.au/sun_protection/tanning_and_solariums/faqs_about_solariums/)

### **Prescribing in the elderly**

The October issue of Australian Family Physician contained an article on prescribing in the elderly, relevant for medication review pharmacists. It reminded readers of the changes in drug metabolism that occurs in the elderly, with altered volume of distribution, resulting in prolonged  $\frac{1}{2}$  life of fat soluble drugs (e.g. diazepam) and increased serum concentration of water soluble drugs (e.g. digoxin, paracetamol), lower serum albumin levels in frail, unwell patients resulting in prolonged  $\frac{1}{2}$  life and higher steady state of some drugs (e.g. warfarin, phenytoin), reduced oxidative metabolism in the liver of drugs metabolised this way (e.g. diazepam, metoprolol, phenytoin), reduced first pass liver metabolism meaning increased bioavailability of some drugs (e.g. metoprolol, nortriptyline) and reduced GFR resulting in prolonged  $\frac{1}{2}$  life and higher steady state levels (e.g. digoxin, cephalexin, morphine).

The article promoted the use of the **SAIL** acronym, with

**S** = SIMPLE – keep the drug regimen simple, with once or maximum twice daily dosing;

**A** = ADVERSE EFFECTS – understand potential adverse effects and drug-drug interactions, and choose drugs with a broad therapeutic margin;

**I** = INDICATION – ensure every prescription drug has an evidence-based, clear indication with a defined therapeutic goal; and

**L** = LIST – provide a medication list to the patient.

Rationalise medicines where possible. Avoid prescribing cascades where additional drugs are used to counter adverse effects of a treatment drug. Many elderly patients have many co-morbidities that require treatment. An average of 5–7 changes to medications are made during hospital admissions that might not be communicated in a timely manner to GPs. Approximately 30% of hospital admissions in the elderly can be related to medications. Hoarding and sharing of medicines occurs in about 42% of elderly patients. Up to 40% of Australians use one or more

CAMs. Under-treatment of pain, cardiac failure, acute MI and osteoporosis occurs in the elderly. Drug classes that commonly cause harm include benzodiazepines, NSAIDs, anticoagulants, opioids, digoxin, diuretics, oral hypoglycaemics and antipsychotics.

The article said that DAAs and HMRs assist the elderly.

See *AFP Vol. 39 No. 10 Oct 2010 p728-733*

### **Guideline on delirium available**

For those working in hospital or the aged care sector, a new guideline on delirium has been produced by NICE. It can be accessed at

<http://www.nice.org.uk/guidance/index.jsp?action=download&o=48522>

The reviewed studies included the following pharmacological agents as risk factors for delirium.

- benzodiazepines.
- antipsychotics.
- anticholinergics (antihistamines, tricyclic antidepressants, antiemetics, some neuroleptics, antipsychotics and benzodiazepines).
- H<sub>2</sub>-receptor antagonists (mainly cimetidine).
- mood stabilising drugs (lithium, valproate).
- non-steroidal anti-inflammatory drugs (mainly ketorolac).
- opioids (morphine, fentanyl, oxycodone, meperidine).
- anaesthesia/analgesia (including bupivacaine).